I hereby certify that this corrence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Attorney Docket No.: A524R1T28900 TTC No.: 16301-028900

Assistant Commissioner for Patents

Washington, D.C. 20231

TOWNSEND And TOWNSEND And CREW LLP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

KATSUYUKI MUSAKA et al.

Application No.: 09/187,551

Filed: November 5, 1998

For: METHOD FOR FORMING A THIN

FILM FOR A SEMICONDUCTOR

DEVICE

Marianne Padgett Examiner:

Art Unit:

1762

DECLARATION OF KATSUYUKI MUSAKA UNDER 37 CFR § 1.132

ECHNOLOGY CENTER 1700

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

- I, Katsuyuki Musaka, hereby declare as follows:
- I am a coinventor of U.S. Application No. 09/187,551, filed November 1. 5, 1998, entitled "Method for Forming a Thin Film for a Semiconductor Device" (hereafter "the present Patent Application").
- I received a B.S. in Computer Science and Engineering from the 2. University of Tsukuba in 1986.
- I am currently employed by Applied Materials, Inc. of Santa Clara, California, the assignee of the present Patent Application, and have been a senior member of the technical staff since 1996. I have over 13 years of experience in semiconductor manufacturing including plasma CVD, and have worked at other companies including Intel and Motorola.

JAN.23.2001

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PATENT

- I was a senior member of the technical staff for Applied Materials at the 4. time of the present Patent Application work.
- I have personal knowledge of tests conducted during work on the subject 5, matter of the present Patent Application.
- Fig. 13 of the present Patent Application shows test results of C₂F₆ flow rate versus stress of the silicon oxide film obtained according to a method of the present Patent Application. Fig. 13 shows a reduction of the stress, which is a compressive stress of about -1.25X109 dyne/cm2 at zero C2F6 flow, with higher C2F6 flow rates. The magnitude of the compressive stress decreases with an increase in the C₂F₆ flow rate. As seen in Fig. 13, the stress changes from negative (i.e., compressive) to positive (i.e., tensile) at about 450 sccm C₂F₆ flow rate. At a C₂F₆ flow rate of about 600 sccm, the stress becomes a tensile stress of about 0.4X109 dyne/cm2.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated:_ 1/26/01

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